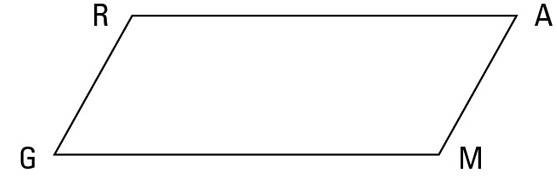
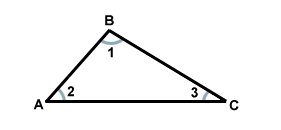
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Per.: \_\_\_\_\_\_\_\_

**3.1 Proving the Triangle Angle Sum Theorem**

auxiliary line: an extra line needed to complete a proof in plane geometry

Examples:

**Given:** *ABC* is a triangle with angles 2, 4, and 5.

**Prove:**  (The sum of the angles in a triangle is 180**°**.)

A

B

C

4

5

2